

Page 6, line 18, insert the following heading: -- BRIEF DESCRIPTION OF THE

B6 SEVERAL VIEWS OF THE DRAWINGS --;

Page 7, line 1, insert the following heading: -- DETAILED DESCRIPTION OF

B7 THE INVENTION --.

IN THE CLAIMS

Amend Claim 1 as follows:

B8 1. (Amended) A superconducting electromagnet apparatus comprising a main coil assembly (1; 1') for producing a central magnetic field in a working volume, main current supply means (5) connected to the main coil assembly for energising and de-energising the main coil assembly, and for persisting the superconducting current flow in the main coil assembly when a desired constant current level has been reached, in order to generate a central magnetic field of high homogeneity in the working volume, a B0 shim coil assembly (2; 2') for providing fine adjustment of the central magnetic field (B0 being the magnetic field along a central axis), the B0 shim coil assembly comprising superconducting shim coil means connected within a closed loop and arranged to magnetically couple with the main coil assembly (1; 1'), auxiliary current supply means (6) connected to the B0 shim coil assembly for supplying current to the closed loop, and for persisting the superconducting current flow in the closed loop when a desired constant current level has been reached, in order to provide fine adjustment of the central magnetic field within the working volume without significantly degrading the homogeneity of the central magnetic field, and control means (31, 38) for controlling the main and auxiliary current supply means (5, 6), wherein the main coil assembly (1; 1'), the B0 shim coil assembly (2; 2') and the control means (31, 38) are adapted to provide significant